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10/762,450	01/23/2004	Toshinori Nagahashi	118464	5463
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/762,450

Applicant(s)

NAGAHASHI, TOSHINORI

Examiner

NANCY BITAR

Art Unit

2624

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12/31/2007.
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-14 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☒ The drawing(s) filed on 23 January 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-850)
Paper No(s)/Mail Date 06/23/05, 11/17/05, 08/09/05, 01/23/04
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
5) ☐ Notice of Inventor's Patent Application
6) ☐ Other: _____

DETAILED ACTION

Response to Arguments

1. Applicant argues that Kondo fails to teach or suggest confirming by the user, adding and correcting the keyword which is proposed by the keyword proposing section. Moreover, applicant asserts that if the face image has not already been registered a name is entered to correspond to the face image. On the other hand, if the face image has already been registered the face image is not proposed to a user at all thus the user cannot confirm the face image. It is true that if the initial figure is already registered Kondo will move to step s817 in order to find any subsequent figure therefore, when a user is not sure about a name he will click on yes and the steps will go back to s811 and register the new name as desired (see figure 8). Therefore, Kondo face image is being confirmed by the user. Applicant argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies "confirming the face image is already have been registered " are not recited in the rejected claims. The claim language is generalized to any face image whether it is registered in the database or not. Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993)
2. All remaining arguments are reliant on the aforementioned and addressed arguments and thus are considered to be wholly addressed herein.

Drawings

3. The drawings are objected to because figure 1,2,10 does not comply with 37 CFR 1.84(o) where suitable descriptive legends may be used subject to approval by Office, or may be

required by the examiner where necessary for understanding of the drawing. They should contain as few words as possible

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

The USPTO "Interim Guidelines for Examination of Patent Applications for Patent Subject Matter Eligibility" (Official Gazette notice of 22 November 2005), Annex IV, reads as follows:

Descriptive material can be characterized as either "functional descriptive material" or "nonfunctional descriptive material." In this context, "functional descriptive material" consists of data structures and computer programs which impart functionality when employed as a computer component. (The definition of "data structure" is "a physical or logical relationship among data elements, designed to support specific data manipulation functions." The New IEEE Standard Dictionary of Electrical and Electronics Terms 308 (5th ed. 1993).) "Nonfunctional descriptive material" includes but is not limited to music, literary works and a compilation or mere arrangement of data.

When functional descriptive material is recorded on some computer-readable medium it becomes structurally and functionally interrelated to the medium and will be statutory in most cases since use of technology permits the function of the descriptive material to be realized. Compare *In re Lowry*, 32 F.3d 1579, 1583-84, 32 USPQ2d 1031, 1035 (Fed. Cir. 1994) (claim to data structure stored on a computer readable medium that increases computer efficiency held statutory) and *Warmerdam*, 33 F.3d at 1360-61, 31 USPQ2d at 1759 (claim to computer having a specific data structure stored in memory held statutory product-by-process claim) with *Warmerdam*, 33 F.3d at 1361, 31 USPQ2d at 1760 (claim to a data structure per se held nonstatutory).

In contrast, a claimed computer-readable medium encoded with a computer program is a computer element which defines structural and functional interrelationships between the computer program and the rest of the computer which permit the computer program's functionality to be realized, and is thus statutory. See *Lowry*, 32 F.3d at 1583-84, 32 USPQ2d at 1035.

4. Claim(s) 8 and 14 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter as follows. Claim 8 defines “a storage medium having a program stored “embodying functional descriptive material. However, the claim does not define a computer-readable medium or memory and is thus non-statutory for that reason (i.e., “When functional descriptive material is recorded on some computer-readable medium it becomes structurally and functionally interrelated to the medium and will be statutory in most cases since use of technology permits the function of the descriptive material to be realized” – Guidelines Annex IV). That is, the scope of the presently claimed “a storage medium having a program stored” can range from paper on which the program is written, to a program simply contemplated and memorized by a person. The examiner suggests amending the claim to embody “a computer readable medium storing a computer program” or equivalent in order to make the claim statutory. Any amendment to the claim should be commensurate with its corresponding disclosure.

Examiner Notes

5. Examiner cites particular columns and line numbers in the references as applied to the claims below for the convenience of the applicant. Although the specified citations are representative of the teachings in the art and are applied to the specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested that, in preparing responses, the applicant fully consider the references in entirety as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior art or disclosed by the examiner

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1-3, 5-10, 12-14 rejected less than 35 U.S.C. 102 (b) as being anticipated by Kondo ET al (2002/0111939).

As to claim 1, Kondo et al. teaches an image retrieving device (image data retrieval apparatus, 100,200, figure 1) for classifying and retrieving an image by detecting an object in the image and adding a keyword, the image retrieving device comprising:
an image storing section for storing the image, which is supposed to be classified and retrieved together with the keyword in a database (image database, 105,figure 1);
an object acknowledging section for acknowledging a predetermined object in the image which is inputted (a user designates an image or holder to be registered. In accordance with the designation a first image is input at step S803, step S805 a decision is made as to whether the input image includes any figure of a person. If so then at step S807 all figures in the image have their respective face images cut out , paragraph [0081-0082]);
a keyword proposing section for proposing the keyword so as to display on a display the keyword which relates to the predetermined object which is acknowledged by the object

acknowledging section (step S813 a name is entered to correspond to the face image. Then at step S815 the face image cut out and the entered name are correlated with each other and thus registered in the face dictionary, paragraph [0084]); and an object information inputting section for confirming by the user, adding, and correcting the keyword which is proposed by the keyword proposing section when the predetermined object acknowledged by the object acknowledging section is similar to the object in the image previously stored in the database (Kondo confirm the keyword before being registered by the user, also registering an image in image database 105 a figure included in the image can be cut out and without making a decision as to whether it has already been registered the face image and an image file name corresponding thereto can be recorded in a face dictionary. note that a user as desired input a keyword necessary for retrieval previously when image data is registered and a user can enter a search period, a keyword and a name of a person to be retrieved, paragraph before or after registration [0086-0089]. Kondo teaches in paragraph [0015] a retrieval key image designator for designating a desired retrieval key image among the stored retrieval key images; and a retriever for using the designated retrieval key image to retrieve from the image database more than one item of image data containing an image identical or analogous to the retrieval key image, see also step 1303 and 1305 and figure 8).

As to claim 2, Kondo et al. teaches an image retrieving device according to claim 1 wherein the object acknowledging section includes: a human detection condition inputting section for setting up conditions for determining whether or not the image contains a human (step s805, a decision is made as to whether the input image includes any figure of a person); a face image detecting section for detecting a face image in the image; and a face image similarity

determining section for detecting a face image which is detected by the face image detecting section so as to detect a similar face image stored in the database according to the detected face image (step s809 an image of the face of a first person is read and at step s811 a decision is made as to whether the face image has already been registered in a face dictionary, paragraph [0084-0087]).

As to claim 3, Kondo et al. teaches an image-retrieving device according to claim 2 wherein the object information inputting section serves as a personal information inputting section for confirming, adding, and correcting personal information (the information obtains more than one item of information, paragraph [0020]).

As to claim 5, Kondo et al teaches an image retrieving device according to claim 2 further comprising a keyword proposing section for proposing the keyword to the image which is inputted last in a case in which the similar face image is not detected by the face image similarity determining section (paragraph [0084] if not a keyword name is entered to correspond to the face image).

As to claim 6, and 9-10 and 12, Kondo et al teaches an image-retrieving device according to claim 1 wherein the keyword is added according to a retrieving template, which is formed by the keywords, which have hierarchical structure (paragraph [0094-0097]).

As to claim 7 differ from claim 1 only in that claim 7 is a method claim whereas; claim 1 is an apparatus claim. Thus, claim 7 is analyzed as previously discussed with respect to claim 1 above.

As to claim 8 differ from claim 1 only in that claim 8 is a computer claim whereas; claim 1 is an apparatus claim. Thus, claim 8 is analyzed as previously discussed with respect to claim 1 above.

As to claim 13 and 14, Kondo teaches a the keyword have a hierarchical structure (the retrieval key image in order to expedite and simply the retrieval of the image, paragraph [0015])

Claim Rejections - 35 U.S.C. § 103

7. The following is a quotation of 35 U.S.C. § 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 4 and 11 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Kondo et al. in view of Luo et al. (US 6,826,316).

While Kondo meets a number of the limitations of the claimed invention, as pointed out more fully above, Kondo fails to specifically teach the a skin color area detecting section is used when the human is detected. Specifically, Luo et al. discloses a study of a photographic image database of over 2000 images, over 70% of the photographic images have people and about the

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same number of images have sizable faces in them. Indeed, people are the single most important subject in photographs. Moreover, Luo et al teaches the use of an image retrieval system by providing perceptually significant features of the image where the use of skin detection as one of a semantic feature utilizes color image segmentation and a predetermined skin where the skin region classification is based on maximum probability according to the average color of a segmented region. The probabilities are mapped to a belief output via a sigmoid belief function. Because the use of skin detection helps retrieve feature based similarities of faces in an image by computing a belief value for all pixels using the Bayes net (column 6, lines 61-67). It would have been obvious to one of ordinary skill in the art to use the skin algorithm in Kondo in order to get better and accurate recognition result thus getting certain identification. Therefore, the claimed invention would have been obvious to one of ordinary skill in the art at the time of the invention by applicant.

As to claim 11, Kondo et al teaches an image-retrieving device according to claim 1 wherein the keyword is added according to a retrieving template, which is formed by the keywords, which have hierarchical structure (paragraph [0094-0097]).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to NANCY BITAR whose telephone number is (571)270-1041. The examiner can normally be reached on Mon-Fri (7:30a.m. to 5:00pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bhavesh Mehta can be reached on 571-272-7453. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Andrew W. Johns/
Primary Examiner, Art Unit 2624

Nancy Bitar

3/15/2008